



Gateway Templates

This chapter provides information to add and update existing Cisco gateways and ports in the Cisco Unified Communications Manager database using Cisco Unified Communications Manager Bulk Administration (BAT).

- [Cisco Gateway Additions, on page 1](#)
- [Find Gateway Template, on page 6](#)
- [Add or Edit Gateway Template, on page 8](#)
- [Gateway Configuration Settings, on page 20](#)
- [Port Configuration Settings, on page 59](#)
- [Topics Related to Gateway Configuration Settings, on page 64](#)

Cisco Gateway Additions

You can use BAT to add Cisco gateways to the Cisco Unified Communications Manager database in bulk.

Related Topics

- [Add Cisco VG200 Gateways Using BAT, on page 1](#)
- [Add Cisco Catalyst 6000 \(FXS\) Gateways and Ports Using BAT, on page 2](#)
- [Add Cisco VG224 Gateways Using BAT, on page 3](#)
- [Add Cisco VG202 and Cisco VG204 Gateway Using BAT, on page 3](#)
- [Topics Related to Gateway Configuration Settings, on page 64](#)

Add Cisco VG200 Gateways Using BAT

When using BAT to add the Cisco VG200 gateways to the Cisco Unified Communications Manager database, you can configure the following types of trunks or ports:

- Foreign Exchange Station (FXS) ports for analog devices
- Foreign Exchange Office (FXO) for loopstart or groundstart trunks
- T1 Primary Rate Interface (PRI) trunks for ISDN services in North America—Currently available only for Cisco VG200 gateways
- E1 Primary Rate Interface (PRI) trunks for ISDN services in Europe—Currently available only for Cisco VG200 gateways.

- Digital Access T1 protocol trunks

Before you begin

Before adding the VG200 gateways to the Cisco Unified Communications Manager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For gateway configuration procedures and commands, refer to the configuration documentation that is supplied with the gateway.

Procedure

- Step 1** Create a Cisco VG200 gateway template to define common values for a set of gateways and ports. See the [Create Cisco VG200 Gateway Template, on page 9](#).
- Step 2** Create a CSV data file to define individual values for each gateway and port that you want to add. See the [CSV Data File Creation for Cisco VG200 Gateways](#).
- Step 3** Insert gateways and ports in the Cisco Unified Communications Manager database. See the [Insert Gateways and Ports to Cisco Unified Communications Manager](#).
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Related Topics

[Topics Related to Gateway Configuration Settings, on page 64](#)

Add Cisco Catalyst 6000 (FXS) Gateways and Ports Using BAT

You can use BAT to add Cisco Catalyst 6000 (FXS) gateways to the Cisco Unified Communications Manager database. You can also add FXS ports on the Cisco Catalyst 6000 (FXS) analog interface modules for analog devices. You must configure a Gateway Directory Number template to associate with these FXS ports and a Catalyst 6000 (FXS) ports template before adding these ports to the Cisco Unified Communications Manager database.

Before you begin

Before using BAT to add the FXS ports for the analog interface modules, you must install the Cisco Catalyst 6000 gateway by performing these tasks:

1. Configure the gateway by using Cisco IOS software command line interface. See the documentation that was supplied with your gateway for configuration instructions.
2. Use Cisco Unified Communications Manager Administration to add the Cisco Catalyst 6000 gateway in the Cisco Unified Communications Manager database. In Cisco Unified Communications Manager Administration, choose Device > Gateway and click Add New. Choose the Cisco Catalyst 6000 24 Port FXS Gateway and device protocol and then click Next.

Procedure

- Step 1** Create a Cisco Catalyst 6000 (FXS) gateway template. See the [Create Cisco Catalyst 6000 \(FXS\) Gateway Template, on page 13](#).

- Step 2** To define common values for a set of FXS ports, create a Cisco Catalyst 6000 (FXS) ports template. See the [FXS/FXO Port Configuration Field Descriptions, on page 34](#).
- Step 3** To define individual values for the FXS ports that you want to add, create a CSV data file. See the [Create CSV Data File for Cisco Catalyst 6000 \(FXS\) Ports](#).
- Step 4** Insert gateways and ports in the Cisco Unified Communications Manager database. See the [Insert Gateways and Ports to Cisco Unified Communications Manager](#).

Related Topics

[Topics Related to Gateway Configuration Settings](#), on page 64

Add Cisco VG224 Gateways Using BAT

When using BAT to add the Cisco VG224 gateways to the Cisco Unified Communications Manager database, you can configure the following types of trunks or ports:

- Foreign Exchange Station (FXS) ports for analog devices

Before you begin

Before adding the VG224 gateways to the Cisco Unified Communications Manager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For gateway configuration procedures and commands, refer to the configuration documentation that is supplied with the gateway.

Procedure

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- Step 1** Create a Cisco VG224 gateway template to define common values for a set of gateways and ports. See the [Create Cisco VG224 Gateway Template, on page 14](#).
- Step 2** Create a CSV data file to define individual values for each gateway and port that you want to add. See the [CSV Data Files Creation for Cisco VG224 Gateways and Ports](#).
- Step 3** Insert gateways and ports in the Cisco Unified Communications Manager database. See the [Insert Gateways and Ports to Cisco Unified Communications Manager](#).

Related Topics

[Topics Related to Gateway Configuration Settings](#), on page 64

Add Cisco VG202 and Cisco VG204 Gateway Using BAT

You must perform the following tasks to insert Cisco VG202 or VG204 gateway and ports to Cisco Unified Communications Manager.

Before you begin

Before adding the VG202 or VG204 gateways to the Cisco Unified Communications Manager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For gateway configuration procedures and commands, refer to the configuration documentation that is supplied with the gateway.

Procedure

- Step 1** Create a Cisco gateway template to define common values for a set of gateways and ports. See the [Create Cisco VG202 or VG204 Gateway Template, on page 15](#).
- Step 2** Create a CSV data file to define individual values for each gateway and port that you want to add. See the [CSV Data File Creation for Cisco VG202 and VG204 Gateways](#).
- Step 3** Insert gateways and ports in the Cisco Unified Communications Manager database. See the [Insert Gateways and Ports to Cisco Unified Communications Manager](#).

Related Topics

[Topics Related to Gateway Configuration Settings](#), on page 64

Add Cisco VG310 Gateway Template

You must perform the following tasks to insert Cisco VG310 gateway to Unified Communications Manager.

Before you begin

Before adding the Cisco VG310 gateways to the Unified Communications Manager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For gateway configuration procedures and commands, refer to the configuration documentation that is supplied with the gateway.

Procedure

- Step 1** Create a Cisco VG310 gateway template to define common values for a set of gateways and ports. See [Create Cisco VG310 Gateway Template, on page 17](#).
 - Step 2** Create a CSV data file to define individual values for each gateway and port that you want to add. See [CSV Data Files Creation for Cisco VG310 Gateways and Ports](#).
 - Step 3** Insert gateways and ports in the Unified Communications Manager database. See [Insert Gateways and Ports to Cisco Unified Communications Manager](#).
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Add Cisco VG320 Gateway Template

You must perform the following tasks to insert Cisco VG320 gateway to Unified Communications Manager.

Before you begin

Before adding the Cisco VG320 gateways to the Unified Communications Manager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For gateway configuration procedures and commands, refer to the configuration documentation that is supplied with the gateway.

Procedure

- Step 1** Create a Cisco VG320 gateway template to define common values for a set of gateways and ports. See [Create Cisco VG320 Gateway Template, on page 18](#).
 - Step 2** Create a CSV data file to define individual values for each gateway and port that you want to add. See [CSV Data Files Creation for Cisco VG320 Gateways and Ports](#).
 - Step 3** Insert gateways and ports in the Unified Communications Manager database. See [Insert Gateways and Ports to Cisco Unified Communications Manager](#).
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Add Cisco VG350 Gateway Template

You must perform the following tasks to insert Cisco VG350 gateway to Unified Communications Manager.

Before you begin

Before adding the Cisco VG350 gateways to the Unified Communications Manager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For gateway configuration procedures and commands, refer to the configuration documentation that is supplied with the gateway.

Procedure

- Step 1** Create a Cisco VG350 gateway template to define common values for a set of gateways and ports. See [Create Cisco VG350 Gateway Template, on page 18](#).
 - Step 2** Create a CSV data file to define individual values for each gateway and port that you want to add. See [CSV Data Files Creation for Cisco VG350 Gateways and Ports](#).
 - Step 3** Insert gateways and ports in the Unified Communications Manager database. See [Insert Gateways and Ports to Cisco Unified Communications Manager](#).
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Add Cisco VG450 Gateway Using BAT

You must perform the following tasks to insert Cisco VG450 gateway to Unified Communications Manager

Before you begin

Before adding the Cisco VG450 gateways to the Unified Communications Manager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For gateway configuration procedures and commands, refer to the configuration documentation that is supplied with the gateway.

Procedure

- Step 1** Create a Cisco VG450 gateway template to define common values for a set of gateways and ports. See [Create Cisco VG450 Gateway Template, on page 19](#).
 - Step 2** Create a CSV data file to define individual values for each gateway and port that you want to add. See [CSV Data Files Creation for Cisco VG450 Gateways and Ports](#).
 - Step 3** Insert gateways and ports in the Unified Communications Manager database. See [Insert Gateways and Ports to Cisco Unified Communications Manager](#).
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Add Cisco ISR 4461 Gateway Using BAT

You must perform the following tasks to insert Cisco ISR 4461 gateway to Cisco Unified Communications Manager.

Before you begin

Before adding the Cisco ISR 4461 gateways to the Cisco Unified Communications Manager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For gateway configuration procedures and commands, refer to the configuration documentation that is supplied with the gateway.

Procedure

- Step 1** Create a Cisco ISR 4461 gateway template to define common values for a set of gateways and ports. See [Create Cisco ISR 4461 Gateway Template, on page 19](#).
 - Step 2** Create a CSV data file to define individual values for each gateway and port that you want to add. See [CSV Data File Creation for Cisco ISR 4461 Gateways](#).
 - Step 3** Insert gateways and ports in the Cisco Unified Communications Manager database. See [Insert Gateways and Ports to Cisco Unified Communications Manager](#).
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Find Gateway Template

Because you might have several gateway templates, Cisco Unified Communications Manager lets you locate specific template on the basis of specific criteria. Use the following procedure to locate templates.



- Note** During your work in a browser session, your find/list search preferences get stored in the cookies on the client machine. If you navigate to other menu items and return to this menu item, or if you close the browser and then reopen a new browser window, your Cisco Unified Communications Manager search preferences get retained until you modify your search.
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Procedure

- Step 1** Choose Bulk Administration > Gateways > Gateway Template.
The Find and List Gateway Template window displays.
- Step 2** From the first Find Gateways where drop-down list, choose one of the following criteria:
- Name
 - Description
 - DN/Route Pattern
 - Calling Search Space
 - Device Pool
 - Route Group Name
 - Device Type
- Step 3** From the second Find Gateways where drop-down list, choose one of the following criteria:
- begins with
 - contains
 - is exactly
 - ends with
 - is empty
 - is not empty
- Step 4** Specify the appropriate search text, if applicable.
- Tip** To find all gateways that are registered in the database, click Find without entering any search text.
- Step 5** Choose Show from the third drop-down list to show the end points that are associated with gateways, and click Find.
- A list of discovered templates displays by
- Device Name
 - Description
 - Device Pool
 - Status
 - IP Address
- Step 6** From the list of records, click the device name that matches your search criteria.
The Gateway Configuration window displays.
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Related Topics

[Topics Related to Gateway Configuration Settings](#), on page 64

Add or Edit Gateway Template

Use BAT to add or edit VG200, VG202, VG204, VG224, VG310, VG320, VG350, VG450, CiscoCatalyst 6000 (FXS), or Cisco ISR 4461 gateway templates in the Cisco Unified Communications Manager database.

Procedure**Step 1**

Choose Bulk Administration > Gateways > Gateway Template.

The Find and List Gateway Template window displays.

- a) To edit an existing gateway template, see the [Find Gateway Template, on page 6](#) and select the gateway that you want to edit.

See the field descriptions for your gateway.

- [VG200 Gateway Template Field Descriptions, on page 20](#)
- [VG224 Gateway Template Field Descriptions, on page 21](#)
- [VG202 and VG204 Gateway Template Field Descriptions, on page 22](#)
- [Cisco Catalyst 6000 24 Port FXS Gateway Template Field Descriptions, on page 29](#)
- [VG310 Gateway Template Field Description, on page 23](#)
- [VG320 Gateway Template Field Description, on page 24](#)
- [VG350 Gateway Template Field Description, on page 25](#)
- [VG450 Gateway Template Field Description, on page 26](#)
- [ISR 4461 Gateway Template Field Descriptions, on page 28](#)

- b) To add a new gateway, click Add New.

The Add a New Gateway window displays.

Step 2

Complete one of the following procedures:

- a) To create a VG200 template, see the [Create Cisco VG200 Gateway Template, on page 9](#).
- b) To create CiscoCatalyst 6000 (FXS) Ports template, see [Create Cisco Catalyst 6000 \(FXS\) Gateway Template, on page 13](#).
- c) To create a VG224 template, see the [Create Cisco VG224 Gateway Template, on page 14](#).
- d) To create a VG202 or VG204 template, see the [Create Cisco VG202 or VG204 Gateway Template, on page 15](#).
- e) To create a Cisco VG310 template, see the [Create Cisco VG310 Gateway Template, on page 17](#).
- f) To create a Cisco VG320 template, see the [Create Cisco VG320 Gateway Template, on page 18](#).
- g) To create a Cisco VG350 template, see the [Create Cisco VG350 Gateway Template, on page 18](#).
- h) To create a Cisco VG450 template, see the [Create Cisco VG450 Gateway Template, on page 19](#).

- i) To create a Cisco ISR 4461 template, see the [Create Cisco ISR 4461 Gateway Template, on page 19](#).
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Create Cisco VG200 Gateway Template

You must create a CiscoVG200 template and then add endpoint identifiers for the network modules. Configure the following endpoint identifiers in the BAT template:

- Foreign Exchange Station (FXS) ports
- Foreign Exchange Office (FXO) trunks
- T1 PRI trunks
- E1 PRI trunks
- T1 CAS trunks

Procedure

- Step 1** Choose Bulk Administration > Gateways > Gateway Template.
The Find and List Gateway window displays.
- Step 2** Click Add New.
The Add a New Gateway Template window displays.
- Step 3** From the Gateway Type drop-down list, select Cisco VG200 and click Next.
The Gateway Template Configuration window displays.
- Step 4** Enter values for all the fields.
See [VG200 Gateway Template Field Descriptions, on page 20](#).
- Step 5** Click Save.
When the insert completes, a new field displays on the pane.
- Step 6** In the Subunit field(s), choose the appropriate type for each subunit field:
- VIC-2FXS—Foreign Exchange Station (FXS) voice interface card
 - VIC-2FXO—Foreign Exchange Office (FXO) voice interface card
 - VWIC-1MFT-T1—Voice WAN interface card with one endpoint for T1CAS or T1 PRI
 - VWIC-2MFT-T1—Voice WAN interface card with two endpoints for T1 CAS or T1 PRI
 - VWIC-1MFT-E1—Voice WAN interface card with one endpoint for E1 PRI
 - VWIC-2MFT-E1—Voice WAN interface card with two endpoints for E1 PRI
- Step 7** Click Save.
When the Status indicates that the update completed, the endpoint identifiers display as links to the right of the subunit drop-down list.
- Step 8** Click an endpoint identifier (for example, 1/0/0) to configure device protocol information and add ports for the installed types of VICs.

For detailed instructions, see the following procedures:

- [Add FXS Ports to VG200 Gateway Template, on page 10](#)
- [Add FXO Ports to VG200 Gateway Template, on page 11](#)
- [Add Digital Access T1 \(T1-CAS\) Ports to VG200 Gateway Template, on page 12](#)
- [Add T1 PRI or E1 PRI Device to VG200 Gateway Template, on page 12](#)

Step 9 Click Reset to reset the gateway and apply the changes.

What to do next

Continue configuring endpoint information and ports as needed.

Cisco VG200 Gateway Template Port Additions

The device protocols and port types that can be configured on VG200 gateways vary by the type of installed voice interface cards.

Related Topics

- [Add FXS Ports to VG200 Gateway Template, on page 10](#)
- [Add FXO Ports to VG200 Gateway Template, on page 11](#)
- [Add Digital Access T1 \(T1-CAS\) Ports to VG200 Gateway Template, on page 12](#)
- [Add T1 PRI or E1 PRI Device to VG200 Gateway Template, on page 12](#)

Add FXS Ports to VG200 Gateway Template

You can use Foreign Exchange Station (FXS) ports to connect to any POTS device. Use this procedure to add FXS ports on a VG200 gateway template.

Before you begin

You must add an VG200 gateway template before configuring ports. See the [Create Cisco VG200 Gateway Template, on page 9](#) for instructions.

Procedure

- Step 1** Find the gateway template to which you want to add FXS ports.
- Step 2** From the Gateway Template Configuration window, click the endpoint identifier for the FXS VIC that you want to configure.
The window refreshes and displays the Gateway Template Configuration window with the end-point icons.
- Step 3** Enter the appropriate Gateway Information and Port Information settings, and click Save.
See the following for field descriptions:
- [FXS/FXO Port Configuration Field Descriptions, on page 34](#)
 - [POTS Port Configuration Settings, on page 60](#)

Note After you insert a POTS port, the window refreshes and displays the POTS port information at the bottom of the window. An Add a new DN link displays in the Directory Number Information area in the left panel.

- Step 4** Click Add a new DN to add directory numbers to the POTS port or, if you configured another type of port, go to [Step 6, on page 11](#).
- Step 5** Choose Back to MGCP Configuration in the Related Links drop-down list to return to the main VG200 Gateway Template Configuration window for the gateway to which you just added the ports and click Go.
- Step 6** Click Reset to reset the gateway and apply the changes.
- Step 7** Repeat [Step 1, on page 10](#) through [Step 5, on page 11](#) to add additional FXS ports.

Related Topics

[Add or Update Phone Lines in BAT Template](#)

[Find Gateway Template](#), on page 6

[Topics Related to Gateway Configuration Settings](#), on page 64

Add FXO Ports to VG200 Gateway Template

Foreign Exchange Office (FXO) ports are used for connecting to a central office or PBX. You can add and configure FXO ports for loop start or ground start on an VG200 gateway template using BAT.



Note Cisco Unified Communications Manager assumes all loop-start trunks lack positive disconnect supervision. Configure trunks with positive disconnect supervision as ground start, so active calls can be maintained during a Cisco Unified Communications Manager server failover.

Before you begin

You must add a VG200 gateway template before configuring ports. See the [Create Cisco VG200 Gateway Template, on page 9](#) for instructions.

Procedure

- Step 1** Find the gateway template to which you want to add FXS ports.
- Step 2** From the Gateway Configuration window, click the endpoint identifiers of the FXO port that you want to configure.
- Step 3** From the Port Type drop-down list, choose either Ground Start or Loop Start.
 - Note** You must choose the same port type for both endpoint identifiers of the VIC-2FXO port. If you choose different port types, a message displays.
- Step 4** Enter the appropriate Gateway Configuration and Port Information settings, and click Save. See [FXS/FXO Port Configuration Field Descriptions, on page 34](#) for field descriptions.
- Step 5** Choose Back to MGCP Configuration in the Related Links drop-down list to return to the main VG200 gateway configuration window for the gateway to which you just added the ports and click Go.
- Step 6** Click Reset to reset the gateway and apply the changes.

- Step 7** To add more FXO ports, repeat [Step 2, on page 11](#) through [Step 4, on page 11](#).

Related Topics

- [Find Gateway Template](#), on page 6
[Topics Related to Gateway Configuration Settings](#), on page 64

Add Digital Access T1 (T1-CAS) Ports to VG200 Gateway Template

You can use BAT to add Digital Access T1 (T1-CAS) ports to an VG200 gateway template.

Procedure

- Step 1** Find the gateway template to which you want to add FXS ports.
- Step 2** From the Gateway Configuration window, click the endpoint identifier of the Digital Access T1 (T1-CAS) port that you want to configure.
- In the Device Protocol drop-down list box that displays, choose Digital Access T1 and click Next.
- Step 3** Enter the appropriate Gateway Configuration settings, and click Save.
- See the [Digital Access T1 Trunks on Cisco VG200 Gateway Template Field Descriptions, on page 42](#) for details.
- Step 4** To reset the gateway and apply the changes, click Reset.
- Step 5** See the [Port Configuration Settings, on page 59](#) for the appropriate settings for the port type that you choose.

Related Topics

- [Find Gateway Template](#), on page 6
[Topics Related to Gateway Configuration Settings](#), on page 64

Add T1 PRI or E1 PRI Device to VG200 Gateway Template

You can use BAT to add T1 PRI or E1 PRI device to an VG200 gateway template.

Procedure

- Step 1** Find the gateway template to which you want to add FXS ports.
- Step 2** From the Gateway Configuration window, click the endpoint identifier of the T1 PRI or E1 PRI port that you want to configure.
- Step 3** Configure the T1 PRI or E1 PRI device protocol settings.
- See [T1 PRI or E1 PRI Trunks on Cisco VG200 Gateway Template Field Descriptions, on page 46](#) for field descriptions.
- Step 4** Click Save.
- Step 5** Click Reset to reset the gateway and apply the changes.

Related Topics

- [Find Gateway Template](#), on page 6

[Topics Related to Gateway Configuration Settings](#), on page 64

Create Cisco Catalyst 6000 (FXS) Gateway Template

Use BAT to create a CiscoCatalyst 6000 FXS gateway template. You must complete all fields unless otherwise noted.

Procedure

- Step 1** Choose Bulk Administration > Gateways > Gateway Template.
The Find and List Gateway window displays.
- Step 2** Click Add New.
The Add a New Gateway Template window displays.
- Step 3** From the Gateway Type drop-down list, choose Cisco Catalyst 6000 24 Port FXS Gateway and click Next.
The Gateway Template Configuration window displays.
- Step 4** Enter a unique name for the template in the Template Name field.
- Step 5** Enter the settings for the fields, and click Save.
See [Cisco Catalyst 6000 24 Port FXS Gateway Template Field Descriptions](#), on page 29 for field descriptions.
- Step 6** Click Add a New Port.
A port configuration dialog opens in a separate window.
- Step 7** From the drop-down list, choose POTS as the port type depending on the gateway model that you are configuring.
See [T1 PRI or E1 PRI Trunks on Cisco VG200 Gateway Template Field Descriptions](#), on page 46 for field descriptions.
- Step 8** Enter the appropriate port configuration settings, and click Save.
See [POTS Port Configuration Settings](#), on page 60 for field descriptions.
If you have inserted POTS ports, the window refreshes and displays the POTS port in the list on the left side of the window. An Add DN link displays to the right of the new port.
- Step 9** To add a directory numbers to an FXS port, click Add DN.
- Step 10** Click Save.
When the Status indicates that the update completed, the template displays on the Find and List Gateways window. To go back to the Find and List window, choose Back to Find and List from the Related Links drop-down list in the top, right corner of the window.
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Related Topics

[Add or Update Phone Lines in BAT Template](#)

[Topics Related to Gateway Configuration Settings](#), on page 64

Create Cisco VG224 Gateway Template

You must create a CiscoVG224 template and then add endpoint identifiers for the network modules. Configure the following endpoint identifiers in the BAT template:

- Foreign Exchange Station (FXS) ports

Procedure

- Step 1** Choose Bulk Administration > Gateways > Gateway Template.
The Find and List Gateway window displays.
- Step 2** Click Add New.
The Add a New Gateway Template window displays.
- Step 3** From the Gateway Type drop-down list, choose VG224 and click Next.
The Add a New Gateway Template window displays.
- Step 4** From the Protocol drop-down list, choose MGCP or SCCP and click Next.
The Gateway Template Configuration window displays.
- Step 5** Enter values for all the fields, and click Save.
See [VG224 Gateway Template Field Descriptions, on page 21](#) for field descriptions.
When the insert completes, a new field displays on the pane.
- Step 6** In the Subunit 0 field, choose the appropriate type for the subunit field from the drop-down list, and click Save.
 - VIC-2FXS—Foreign Exchange Station (FXS) voice interface card.
When the Status indicates that the update completed, the endpoint identifiers display as links to the right of the subunit drop-down list.
- Step 7** Click an endpoint identifier (for example, 1/0/0) to configure device protocol information and add ports for the installed types of VICs.
- Step 8** Click Reset to reset the gateway and apply the changes.
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What to do next

Continue configuring endpoint information and ports as needed.

Related Topics

- [Add FXS Ports to VG224 Gateway Template, on page 15](#)
- [Topics Related to Gateway Configuration Settings, on page 64](#)

Add FXS Ports to VG224 Gateway Template

Use BAT to add FXS ports on a VG224 gateway template. Foreign Exchange Station (FXS) ports are used to connect to POTS devices.

Before you begin

You must add a VG224 gateway template before configuring ports.

Procedure

- Step 1** Find the gateway template to which you want to add FXS ports.
- Step 2** From the Gateway Template Configuration window, click the endpoint identifier for the FXS VIC that you want to configure.
- The window refreshes and displays the Gateway Template Configuration window with the endpoint icons.
- Step 3** Enter the appropriate Gateway Information and Port Information settings, and click Save.
- See the following for field descriptions:
- [FXS/FXO Port Configuration Field Descriptions, on page 34](#)
 - [POTS Port Configuration Settings, on page 60](#)
- Note** After you insert a POTS port, the window refreshes and displays the POTS port information at the bottom of the window. An Add a new DN link displays in the Directory Number Information area in the left panel.
- Step 4** Click Add a new DN to add directory numbers to the POTS port or, if you configured another type of port, go to [Step 6](#).
- Step 5** To return to the main VG224 Gateway Template Configuration window for the gateway to which you just added the ports, select Back to MGCP Configuration in the Related Links drop-down list and click Go.
- Step 6** Click Reset to reset the gateway and apply the changes.
- Step 7** Repeat [Step 1](#) through [Step 5](#) to add additional FXS ports.
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Related Topics

- [Add or Update Phone Lines in BAT Template](#)
- [Create Cisco VG224 Gateway Template, on page 14](#)
- [Find Gateway Template, on page 6](#)
- [Topics Related to Gateway Configuration Settings, on page 64](#)

Create Cisco VG202 or VG204 Gateway Template

You must create a Cisco VG202 or VG204 template and then add endpoint identifiers for the network modules. Configure the following endpoint identifiers in the BAT template:

- Foreign Exchange Station (FXS) ports

Procedure

- Step 1** Choose Bulk Administration > Gateways > Gateway Template.
The Find and List Gateway window displays.
- Step 2** Click Add New.
The Add a New Gateway Template window displays.
- Step 3** From the Gateway Type drop-down list, choose VG202 or VG204 and click Next.
The Add a New Gateway Template window displays.
- Step 4** From the Protocol drop-down list, choose MGCP or SCCP and click Next.
The Gateway Template Configuration window displays.
- Step 5** Enter values for all the fields, and click Save.
See [VG202 and VG204 Gateway Template Field Descriptions](#), on page 22 for field descriptions.
When the insert completes, a new Subunit 0 field displays on the pane.
- Step 6** In the Subunit 0 field, choose the appropriate type for the subunit field from the drop-down list box, and click Save.
When the Status indicates that the update completed, the endpoint identifiers display as links to the right of the subunit drop-down list boxes.
- Step 7** Click an endpoint identifier (for example, 0/0) to configure device protocol information and add ports for the installed types of VICs.
- Step 8** Click Reset to reset the gateway and apply the changes.
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What to do next

Continue configuring endpoint information and ports as needed.

Related Topics

- [Add FXS Ports to VG202 or VG204 Gateway Template](#), on page 16
- [Find Gateway Template](#), on page 6
- [Topics Related to Gateway Configuration Settings](#), on page 64

Add FXS Ports to VG202 or VG204 Gateway Template

Use BAT to add FXS ports on a VG202 or VG204 gateway template. You can use Foreign Exchange Station (FXS) ports to connect to any POTS device.

Before you begin

You must add a VG202 or VG204 gateway template before you configure ports. See the [Create Cisco VG202 or VG204 Gateway Template](#), on page 15 for instructions.

Procedure

- Step 1** Find the gateway template to which you want to add FXS ports.
- Step 2** From the Gateway Template Configuration window, click the endpoint identifier for the FXS VIC that you want to configure.
The window refreshes and displays the Gateway Template Configuration window with the endpoint icons.
- Step 3** Enter the appropriate Gateway Information and Port Information settings and click Save.
See the following for field descriptions:
- [FXS/FXO Port Configuration Field Descriptions, on page 34](#)
 - [POTS Port Configuration Settings, on page 60](#)
- Note** After you insert a POTS port, the window refreshes and displays the POTS port information at the bottom of the window. An Add a new DN link displays in the Directory Number Information area in the left panel.
- Step 4** Click Add a new DN to add directory numbers to the POTS port or, if you configured another type of port, go to [Step 6, on page 17](#).
- Step 5** To return to the main VG202 or VG204 Gateway Template Configuration window for the gateway to which you just added the ports, choose Back to MGCP Configuration in the Related Links drop-down list and click Go (if you configuring an MGCP gateway).
- Step 6** Click Reset to reset the gateway and apply the changes.
- Step 7** Repeat [Step 2, on page 17](#) through [Step 5, on page 17](#) to add additional FXS ports.

Related Topics

- [Add or Update Phone Lines in BAT Template](#)
- [Find Gateway Template, on page 6](#)
- [Topics Related to Gateway Configuration Settings, on page 64](#)

Create Cisco VG310 Gateway Template

Use BAT to create a Cisco VG310 Gateway template. You must complete all fields unless otherwise noted.

Procedure

- Step 1** Choose Bulk Administration > Gateways > Gateway Template.
The Find and List Gateway window displays.
- Step 2** Click Add New.
The Add a New Gateway Template window displays.
- Step 3** From the Gateway Type drop-down list, choose VG310 and click Next.
The Gateway Template Configuration window displays.
- Step 4** From the Protocol drop-down list, choose MGCP or SCCP and click Next.

The Gateway Template Configuration window displays.

Step 5 Enter a unique name for this template in the Template Name field.

Step 6 Enter values for all the fields, and click Save.

See [VG310 Gateway Template Field Description, on page 23](#) for field descriptions.

Create Cisco VG320 Gateway Template

Use BAT to create a Cisco VG320 Gateway template. You must complete all fields unless otherwise noted.

Procedure

Step 1 Choose Bulk Administration > Gateways > Gateway Template.

The Find and List Gateway window displays.

Step 2 Click Add New.

The Add a New Gateway Template window displays.

Step 3 From the Gateway Type drop-down list, choose VG320 and click Next.

The Gateway Configuration window displays.

Step 4 From the Protocol drop-down list, choose MGCP or SCCP and click Next.

The Gateway Template Configuration window displays.

Step 5 Enter a unique name for the template in the Template Name field.

Step 6 Enter values for all the fields, and click Save.

See [VG320 Gateway Template Field Description, on page 24](#) for field descriptions.

Create Cisco VG350 Gateway Template

Use BAT to create a VG350 Gateway template. You must complete all the fields unless noted.

Procedure

Step 1 Choose Bulk Administration > Gateways > Gateway Template.

The Find and List Gateway window displays.

Step 2 Click Add New.

The Add a New Gateway Template window displays.

Step 3 From the Gateway Type drop-down, choose VG350 and click Next.

- Step 4** From the Protocol drop-down list, choose MGCP or SCCP, and click Next.
The Gateway Template Configuration window displays.
- Step 5** Enter a unique name for the template in the Template Name field.
- Step 6** Enter values for all the fields, and click Save.
See [VG350 Gateway Template Field Description, on page 25](#) for field descriptions.
-

Create Cisco VG450 Gateway Template

Use BAT to create a VG450 Gateway template. You must complete all fields unless noted.

Procedure

- Step 1** Choose Bulk Administration > Gateways > Gateway Template.
The Find and List Gateway window displays.
- Step 2** Click Add New.
The Add a new Gateway Template window displays.
- Step 3** From the Gateway Type drop-down list, choose VG450 and click Next.
- Step 4** From the Protocol drop-down list, choose SIP, MGCP or SCCP and click Next.
The Gateway Template Configuration window displays.
- Step 5** Enter a unique name for the template in the Template Name field.
- Step 6** Enter values for all the fields, and click Save.
See [VG450 Gateway Template Field Description, on page 26](#) for field descriptions.
-

Create Cisco ISR 4461 Gateway Template

Use BAT to create a Cisco ISR 4461 Gateway template. You must complete all fields unless noted.

Procedure

- Step 1** Choose Bulk Administration > Gateways > Gateway Template.
The Find and List Gateway window displays.
- Step 2** Click Add New.
The Add a new Gateway Template window displays.
- Step 3** From the Gateway Type drop-down list, choose Cisco ISR 4461 and click Next.
- Step 4** From the Protocol drop-down list, choose SIP, SCCP or MGCP and click Next.

The Gateway Template Configuration window displays.

Step 5 Enter a unique name for the template in the Template Name field.

Step 6 Enter values for all the fields, and click Save.

See [ISR 4461 Gateway Template Field Descriptions, on page 28](#) for field descriptions.

Gateway Configuration Settings

Detailed field descriptions are available for all Cisco-supported gateways and ports that you can add or update using BAT.

Related Topics

[Cisco Catalyst 6000 24 Port FXS Gateway Template Field Descriptions, on page 29](#)

[Digital Access T1 Trunks on Cisco VG200 Gateway Template Field Descriptions, on page 42](#)

[FXS/FXO Port Configuration Field Descriptions, on page 34](#)

[Port Configuration Settings, on page 59](#)

[T1 PRI or E1 PRI Trunks on Cisco VG200 Gateway Template Field Descriptions, on page 46](#)

[VG200 Gateway Template Field Descriptions, on page 20](#)

[VG202 and VG204 Gateway Template Field Descriptions, on page 22](#)

[VG224 Gateway Template Field Descriptions, on page 21](#)

VG200 Gateway Template Field Descriptions

The following table provides detailed descriptions for VG200 gateway template configuration settings.

Table 1: VG200 Gateway Configuration Settings

Field	Description
Template Name	Enter a name up to 64 characters that identifies the CiscoVG200 gateway template.
Description	Enter a description that clarifies the purpose of the device.
Cisco Unified Communications Manager Group	Choose a Unified Communications Manager redundancy group from the list. A Unified Communications Manager redundancy group includes a prioritized list of up to three Unified Communications Managers. The first Unified Communications Manager in the list serves as the primary Unified Communications Manager. If the primary Unified Communications Manager is not available or fails, the gateway attempts to connect with the next Unified Communications Manager in the list and so on.

Field	Description
Configured Slots, VICs, and Endpoints	
Note	You must specify the beginning port number for some VICs. For example, if the VIC in Subunit 0 begins at 0 and has two ports (0 and 1), the VIC in Subunit 1 must begin at a port number greater than 1 and have two ports (2 and 3 or 4 and 5).
Note	VG200 gateway has only one slot.
Module in Slot 1	<p>For the available slot on the VG200 gateway, choose from the following type of modules:</p> <ul style="list-style-type: none"> • NM-1V—Network Module-1Voice has one voice interface card (VIC) in Sub-Unit 0 for FXS or FXO. • NM-2V—Network Module-2Voice has two VICs, one in Sub-Unit 0 and one in Sub-Unit 1 for either FXS or FXO. • NM-HDV—Network Module-High Density Voice has one VIC in Sub-Unit 0 either for T1 CAS or T1 PRI, or for E1 PRI. • None—No network modules are installed.
Product-Specific Configuration	
Model-specific configuration fields defined by the gateway manufacturer	<p>The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice.</p> <p>To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box.</p> <p>If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.</p>

VG224 Gateway Template Field Descriptions

The following table provides detailed descriptions for VG224 gateway template configuration settings.

Table 2: VG224 Gateway Configuration Settings

Field	Description
Template Name	Enter a name of up to 64 characters that identifies the CiscoVG224 gateway template.

Field	Description
Description	Enter a description that clarifies the purpose of the device.
Cisco Unified Communications Manager Group	<p>From the drop-down list box, choose a Cisco Unified Communications Manager redundancy group.</p> <p>A Cisco Unified Communications Manager redundancy group includes a prioritized list of up to three Cisco Unified Communications Managers. The first Cisco Unified Communications Manager in the list serves as the primary Cisco Unified Communications Manager. If the primary Cisco Unified Communications Manager is not available or fails, the gateway attempts to connect with the next Cisco Unified Communications Manager in the list and so on.</p>
Configured Slots, VICs, and Endpoints	
Module in Slot 2	For the available slot on the VG224 gateway, select Analog from the drop-down list box.
Subunit 0	<p>For the available subunit 0 on the VG224 gateway, choose 24FXS as the subunit from the drop-down list box.</p> <p>Note Be aware that only Module in Slot 2, and Subunit 0 are available for VG224 gateways.</p>

VG202 and VG204 Gateway Template Field Descriptions

The following table provides detailed descriptions for VG202 and VG204 gateway template configuration settings.

Table 3: VG202 and VG204 Gateway Configuration Settings

Field	Description
Template Name	Enter a name of up to 64 characters that identifies the CiscoVG202 or VG204 gateway template.
Description	Enter a description that clarifies the purpose of the device.

Field	Description
Cisco Unified Communications Manager Group	<p>From the drop-down list box, choose a Cisco Unified Communications Manager redundancy group.</p> <p>A Cisco Unified Communications Manager redundancy group includes a prioritized list of up to three Cisco Unified Communications Managers. The first Cisco Unified Communications Manager in the list serves as the primary Cisco Unified Communications Manager. If the primary Cisco Unified Communications Manager is not available or fails, the gateway attempts to connect with the next Cisco Unified Communications Manager in the list and so on.</p>
Configured Slots, VICs, and Endpoints	
Module in Slot 0	For the available slot on the VG202 or VG204 gateway, select Analog from the drop-down list box.
Subunit 0	<p>For the available subunit 0 on the VG202 or VG204 gateway, choose 2FXS as the subunit from the drop-down list box.</p> <p>Note Be aware that only Module in Slot 0, and Subunit 0 are available for VG202 and VG204 gateways.</p>

VG310 Gateway Template Field Description

The following table provides detailed descriptions for Cisco VG310 gateway template configuration settings.

Table 4: VG310 Gateway Configuration Settings

Field	Description
Template Name	Enter a name of up to 64 characters that identifies the VG310 gateway template.
Description	Enter a description that clarifies the purpose of the device.

Field	Description
Cisco Unified Communications Manager Group	<p>From the drop-down list box, choose a Cisco Unified Communications Manager redundancy group.</p> <p>A Cisco Unified Communications Manager redundancy group includes a prioritized list of up to three Cisco Unified Communications Managers. The first Cisco Unified Communications Manager in the list serves as the primary Cisco Unified Communications Manager. If the primary Cisco Unified Communications Manager is not available or fails, the gateway attempts to connect with the next Cisco Unified Communications Manager in the list and so on.</p>
Configured Slots, VICs, and Endpoints	
Module in Slot 0	For the available slot on the VG310 gateway, select VG-2VWIC-MBRD from the drop-down list box.
Product-Specific Configuration	
Model-specific configuration fields defined by the gateway manufacturer	<p>The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice.</p> <p>To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box.</p> <p>If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.</p>

VG320 Gateway Template Field Description

The following table provides detailed descriptions for Cisco VG320 gateway template configuration settings.

Table 5: VG320 Gateway Configuration Settings

Field	Description
Template Name	Enter a name of up to 64 characters that identifies the VG320 gateway template.
Description	Enter a description that clarifies the purpose of the device.

Field	Description
Cisco Unified Communications Manager Group	<p>From the drop-down list box, choose a Cisco Unified Communications Manager redundancy group.</p> <p>A Cisco Unified Communications Manager redundancy group includes a prioritized list of up to three Cisco Unified Communications Managers. The first Cisco Unified Communications Manager in the list serves as the primary Cisco Unified Communications Manager. If the primary Cisco Unified Communications Manager is not available or fails, the gateway attempts to connect with the next Cisco Unified Communications Manager in the list and so on.</p>
Configured Slots, VICs, and Endpoints	
Module in Slot 0	For the available slot on the VG320 gateway, select VG-3VWIC-MBRD from the drop-down list box.
Product-Specific Configuration	
Model-specific configuration fields defined by the gateway manufacturer	<p>The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice.</p> <p>To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box.</p> <p>If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.</p>

VG350 Gateway Template Field Description

The following table provides detailed descriptions for Cisco VG350 gateway template configuration settings.

Table 6: VG350 Gateway Configuration Settings

Field	Description
Template Name	Enter a name of up to 64 characters that identifies the VG350 gateway template.
Description	Enter a description that clarifies the purpose of the device.

Field	Description
Cisco Unified Communications Manager Group	<p>From the drop-down list box, choose a Cisco Unified Communications Manager redundancy group.</p> <p>A Cisco Unified Communications Manager redundancy group includes a prioritized list of up to three Cisco Unified Communications Managers. The first Cisco Unified Communications Manager in the list serves as the primary Cisco Unified Communications Manager. If the primary Cisco Unified Communications Manager is not available or fails, the gateway attempts to connect with the next Cisco Unified Communications Manager in the list and so on.</p>
Configured Slots, VICs, and Endpoints	
Module in Slot 0	For the available slot on the VG350 gateway, select NM-4VWIC-MBRD from the drop-down list box.
Module in Slot 1/3	For the available slot on the VG350 gateway, select NONE from the drop-down list.
Module in Slot 2/4	For the available slot on the VG350 gateway, select ANALOG from the drop-down list.
Product-Specific Configuration	
Model-specific configuration fields defined by the gateway manufacturer	<p>The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice.</p> <p>To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box.</p> <p>If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.</p>

VG450 Gateway Template Field Description

The following table provides detailed descriptions for Cisco VG450 gateway template configuration settings.

Table 7: VG450 Gateway Configuration Settings

Field	Description
Template Name	Enter a name of up to 64 characters that identifies the VG450 gateway template.
Description	Enter a description that clarifies the purpose of the device.
Unified Communications Manager Group	<p>From the drop-down list box, choose a Unified Communications Manager redundancy group.</p> <p>A Unified Communications Manager redundancy group includes a prioritized list of up to three Unified Communications Managers. The first Unified Communications Manager in the list serves as the primary Unified Communications Manager. If the primary Unified Communications Manager is not available or fails, the gateway attempts to connect with the next Unified Communications Manager in the list and so on.</p>
Configured Slots, VICs, and Endpoints	
Module in Slot 0	For the available slot on the VG450 gateway, select ISR-3NIM-MBRD from the drop-down list box.
Module in Slot 1/2/3	<p>For the available slot on the VG450 gateway, select ANALOG from the drop-down list.</p> <p>ANALOG—In the SM-X slot on the gateway, users can choose SM-X-16FXS/FXO, SM-X-24FXS/4FXO, SM-X-8FXS/12FXO, SM-X-56FXS, or SM-X-72FXS modules.</p>
Product-Specific Configuration	
Model-specific configuration fields defined by the gateway manufacturer	<p>The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice.</p> <p>To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box.</p> <p>If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.</p>

ISR 4461 Gateway Template Field Descriptions

The following table provides detailed descriptions for Cisco ISR 4461 gateway template configuration settings.

Table 8: ISR 4461 Gateway Configuration Settings

Field	Description
Template Name	Enter a name of up to 64 characters that identifies the ISR 4461 gateway template.
Description	Enter a description that clarifies the purpose of the device.
Cisco Unified Communications Manager Group	<p>From the drop-down list box, choose a Cisco Unified Communications Manager redundancy group.</p> <p>A Cisco Unified Communications Manager redundancy group includes a prioritized list of up to three Cisco Unified Communications Managers. The first Cisco Unified Communications Manager in the list serves as the primary Cisco Unified Communications Manager. If the primary Cisco Unified Communications Manager is not available or fails, the gateway attempts to connect with the next Cisco Unified Communications Manager in the list and so on.</p>
Configured Slots, VICs, and Endpoints	
Module in Slot 0	For the available slot on the ISR 4461 gateway, select ISR-3NIM-MBRD from the drop-down list box.
Module in Slot 1/2/3	<p>For the available slot on the ISR 4461 gateway, choose from the following type of modules:</p> <ul style="list-style-type: none"> • ANALOG—In the SM-X slot on the gateway, users can choose SM-X-16FXS/FXO, SM-X-24FXS/4FXO, SM-X-8FXS/12FXO, SM-X-56FXS, or SM-X-72FXS modules. • SM-X-NIM-ADPTR—Adapter for the NIM in a SM-X slot on the gateway.
Product-Specific Configuration	

Field	Description
Model-specific configuration fields defined by the gateway manufacturer	<p>The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice.</p> <p>To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box.</p> <p>If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.</p>

Cisco Catalyst 6000 24 Port FXS Gateway Template Field Descriptions

The following table lists configuration settings for CiscoCatalyst 6000 24 port FXS gateway template.

Table 9: CiscoCatalyst 6000 24 Port FXS Gateway Configuration Settings

Field	Description
Description	Enter the purpose of the device. The description can include up to 50 characters in any language, but it cannot include double-quotes ("), percentage sign (%), ampersand (&), back-slash (\), or angle brackets (<>).
Device Pool	<p>From the drop-down list box, select the appropriate device pool.</p> <p>The device pool specifies a collection of properties for this device that includes Communications Manager Group, Date/Time Group, Region, and Calling Search Space for auto-registration of devices.</p>
Common Device Configuration	<p>Choose the common device configuration to which you want this gateway assigned. The common device configuration includes the attributes (services or features) that are associated with a particular user. You configure the common device configurations in the Common Device Configuration window.</p> <p>To see the common device configuration settings, click the View Details link.</p>

Field	Description
Media Resource Group List	<p>This list provides a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from among the available media resources according to the priority order that a Media Resource Group List defines.</p>
Network Hold MOH Audio Source	<p>Choose the network hold audio source for this group of IP gateways.</p> <p>The network hold audio source identifies the audio source from which music is played when the system places a call on hold, such as when the user transfers or parks a call.</p>
Calling Search Space	<p>From the drop-down list box, select the appropriate calling search space. The calling search space specifies a collection of partitions that are searched to determine how a collected (originating) number should be routed.</p> <p>You can configure the number of calling search spaces that display in this drop-down list box by using the Max List Box Items enterprise parameter. If more calling search spaces exist than the Max List Box Items enterprise parameter specifies, the ellipsis button (...) displays next to the drop-down list box. Click the ... button to display the Select Calling Search Space window. Enter a partial calling search space name in the List items where Name contains field. Click the desired calling search space name in the list of calling search spaces that displays in the Select item to use box and click OK.</p> <p>Note To set the maximum list box items, choose System > Enterprise Parameters and choose UnifiedCMAAdmin Parameters.</p>
AAR Calling Search Space	<p>Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.</p>
Location	<p>Select the appropriate location for this device. The location specifies the total bandwidth that is available for calls to and from this location. A location setting of None means that the locations feature does not keep track of the bandwidth that this device consumes.</p>

Field	Description
AAR Group	<p>Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.</p>
Network Locale	<p>From the drop-down list box, choose the locale that is associated with the gateway. The network locale identifies a set of detailed information to support the hardware in a specific location. The network locale contains a definition of the tones and cadences that the device uses in a specific geographic area.</p> <p>Note Choose only a network locale that is already installed and supported by the associated devices. The list contains all available network locales for this setting, but not all are necessarily installed. If the device is associated with a network locale that it does not support in the firmware, the device will fail to come up.</p>

Field	Description
Use Trusted Relay Point	<p>From the drop-down list box, enable or disable whether Cisco Unified Communications Manager inserts a trusted relay point (TRP) device with this media endpoint. Choose one of the following values:</p> <ul style="list-style-type: none"> • Default—If you choose this value, the device uses the Use Trusted Relay Point setting from the common device configuration with which this device associates. • Off—Choose this value to disable the use of a TRP with this device. This setting overrides the Use Trusted Relay Point setting in the common device configuration with which this device associates. • On—Choose this value to enable the use of a TRP with this device. This setting overrides the Use Trusted Relay Point setting in the common device configuration with which this device associates. <p>A Trusted Relay Point (TRP) device designates an MTP or transcoder device that is labeled as Trusted Relay Point.</p> <p>Cisco Unified Communications Manager places the TRP closest to the associated endpoint device if more than one resource is needed for the endpoint (for example, a transcoder or RSVP Agent).</p> <p>If both TRP and MTP are required for the endpoint, TRP gets used as the required MTP.</p>
Port Selection Order	<p>Choose the order in which ports are chosen. If you are not sure which port order to use, choose TOP_DOWN:</p> <ul style="list-style-type: none"> • TOP_DOWN—Selects ports in descending order, from port 1 to port 8. • BOTTOM_UP—Selects ports in ascending order, from port 8 to port 1.
Load Information	<p>Enter the appropriate firmware load information for the gateway.</p> <p>The values that you enter here override the default values for this gateway.</p>

Field	Description
Transmit UTF-8 for Calling Party Name	<p>This device uses the user locale setting of the device's device pool to determine whether to send unicode and whether to translate received unicode information.</p> <p>For the sending device, if you check this check box and the user locale setting in the device's device pool matches the terminating phone's user locale, the device sends unicode. If the user locale settings do not match, the device sends ASCII.</p> <p>The receiving device translates incoming unicode characters based on the user locale setting of the sending device's device pool. If the user locale setting matches the terminating phone's user locale, the phone displays the characters.</p> <p>Note The phone may display junk characters if the two ends of the trunk configure user locales that do not belong to the same language group.</p>
Calling Party Transformation CSS	<p>This setting allows you to localize the calling party number on the device. Make sure that the Calling Party Transformation CSS that you choose contains the calling party transformation pattern that you want to assign to this device.</p> <p>The device takes on the attributes of the Calling Party Transformation Pattern when you assign the pattern to a partition where the Calling Party Transformation CSS exists.</p>
Use Device Pool Calling Party Transformation CSS	<p>To use the Calling Party Transformation CSS that is configured in the device pool that is assigned to this device, check this check box. If you do not check this check box, the device uses the Calling Party Transformation CSS that you configured in the device configuration window.</p>
Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain	<p>From the drop-down list box, choose an MLPP domain to associate with this device. If you leave the value <None>, this device inherits its MLPP domain from the value that was set for the device's device pool. If the device pool does not have an MLPP Domain setting, this device inherits its MLPP Domain from the value that was set for the MLPP Domain Identifier enterprise parameter.</p>
MLPP Indication	<p>This device type does not have this setting.</p>

Field	Description
MLPP Preemption	This setting does not have this device type.
Geo Location Configuration	
Geo Location	<p>From the drop-down list box, select a geo location.</p> <p>You can select the Unspecified geo location, which designates that this device does not associate with a geo location.</p> <p>You can also select a geo location that has been configured with the System > Geolocation Configuration menu option.</p>
Geo Location Filter	<p>From the drop-down list box, select a geo location filter.</p> <p>If you leave the <None> setting, no geo location filter gets applied for this device.</p> <p>You can also select a geo location filter that has been configured with the System > Geolocation Filter menu option.</p>

FXS/FXO Port Configuration Field Descriptions

The following table provides detailed descriptions for FXS/FXO port configuration settings.

For the VG200 gateway, not all switch emulation types support the network side. How you configure the gateway switch type determines whether you may or may not be able to set network side.

Table 10: FXS/FXO Port Configuration Settings

Field	Description
Device Information	
End-Point Name	For VG200 gateways, this display-only field contains a string that Cisco Unified Communications Manager generates that uniquely identifies the VG200 analog interface.
Description	<p>Cisco Unified Communications Manager generates a string that uniquely identifies the analog MGCP description.</p> <p>For example: AALN/S0/SU1/1@domain.com</p> <p>You can edit this field. The description can include up to 50 characters in any language, but it cannot include double-quotes ("), percentage sign (%), ampersand (&), back-slash (\), or angle brackets (<>).</p>

Field	Description
Device Pool	<p>From the drop-down list box, choose the appropriate device pool.</p> <p>The device pool specifies a collection of properties for this device including Communications Manager Group, Date/Time Group, Region, and Calling Search Space for auto registration of devices.</p>
Media Resource Group List	<p>This list provides a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from among the available media resources according to the priority order that is defined in a Media Resource Group List.</p>
Packet Capture Mode (for Cisco IOS MGCP gateways only)	<p>Configure this field only when you need to troubleshoot encrypted signaling information for the Cisco IOS MGCP gateway. Configuring packet capturing may cause call-processing interruptions. For more information about this field, see the Cisco Unified Communications Manager Security Guide.</p>
Packet Capture Duration (for Cisco IOS MGCP gateways only)	<p>Configure this field only when you need to troubleshoot encrypted signaling information for the Cisco IOS MGCP gateway. Configuring packet capturing may cause call-processing interruptions. For more information about this field, see the Cisco Unified Communications Manager Security Guide.</p>
Calling Search Space	<p>From the drop-down list box, choose the appropriate calling search space. A calling search space comprises a collection of route partitions that are searched to determine how a collected (originating) number should be routed.</p>
AAR Calling Search Space	<p>Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.</p>

Field	Description
Location	<p>Use locations to implement call admission control (CAC) in a centralized call-processing system. CAC enables you to regulate audio quality and video availability by limiting the amount of bandwidth that is available for audio and video calls over links between locations. The location specifies the total bandwidth that is available for calls to and from this location.</p> <p>From the drop-down list box, choose the appropriate location for this device.</p> <p>A location setting of Hub_None means that the locations feature does not keep track of the bandwidth that this device consumes. A location setting of Phantom specifies a location that enables successful CAC across intercluster trunks that use H.323 or SIP protocol.</p> <p>To configure a new location, use the System > Location menu option.</p>
AAR Group	<p>Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.</p>
Network Locale	<p>From the drop-down list box, choose the locale that is associated with the gateway. The network locale identifies a set of detailed information to support the hardware in a specific location. The network locale contains a definition of the tones and cadences that the device uses in a specific geographic area.</p> <p>Note Choose only a network locale that is already installed and that the associated devices support. The list contains all available network locales for this setting, but not all are necessarily installed. If the device is associated with a network locale that it does not support in the firmware, the device will fail to come up.</p>

Field	Description
Use Trusted Relay Point	<p>From the drop-down list box, enable or disable whether Cisco Unified Communications Manager inserts a trusted relay point (TRP) device with this media endpoint. Choose one of the following values:</p> <ul style="list-style-type: none"> • Default—If you choose this value, the device uses the Use Trusted Relay Point setting from the common device configuration with which this device associates. • Off—Choose this value to disable the use of a TRP with this device. This setting overrides the Use Trusted Relay Point setting in the common device configuration with which this device associates. • On—Choose this value to enable the use of a TRP with this device. This setting overrides the Use Trusted Relay Point setting in the common device configuration with which this device associates. <p>A Trusted Relay Point (TRP) device designates an MTP or transcoder device that is labeled as Trusted Relay Point.</p> <p>Cisco Unified Communications Manager places the TRP closest to the associated endpoint device if more than one resource is needed for the endpoint (for example, a transcoder or RSVP Agent).</p> <p>If both TRP and RSVP Agent are needed for the endpoint, Cisco Unified Communications Manager first tries to find an RSVP Agent that can also be used as a TRP.</p> <p>If both TRP and transcoder are needed for the endpoint, Cisco Unified Communications Manager first tries to find a transcoder that is also designated as a TRP.</p>

Field	Description
Transmit UTF-8 for Calling Party Name	<p>This device uses the user locale setting of the device pool for the device to determine whether to send unicode and whether to translate received unicode information.</p> <p>For the sending device, if you check this check box and the user locale setting in the device pool for the device matches the terminating phone user locale, the device sends unicode. If the user locale settings do not match, the device sends ASCII.</p> <p>The receiving device translates incoming unicode characters based on the user locale setting of the sending device pool for the device. If the user locale setting matches the terminating phone user locale, the phone displays the characters.</p> <p>Note The phone may display junk characters if the two ends of the trunk configure user locales that do not belong to the same language group.</p>
Calling Party Transformation CSS	<p>This setting, which displays for FXS ports (not FXO ports), allows you to localize the calling party number on the device. Make sure that the Calling Party Transformation CSS that you choose contains the calling party transformation pattern that you want to assign to this device.</p> <p>Tip Before the call occurs, the device must apply the transformation by using digit analysis. If you configure the Calling Party Transformation CSS as None, the transformation does not match and does not get applied. Ensure that you configure the Calling Party Transformation Pattern in a non-null partition that is not used for routing.</p>
Use Device Pool Calling Party Transformation CSS	<p>To use the Calling Party Transformation CSS that is configured in the device pool that is assigned to this device, check this check box. If you do not check this check box, the device uses the Calling Party Transformation CSS that you configured in the Gateway Configuration window.</p> <p>This settings displays for FXS ports, not FXO ports.</p>

Field	Description
Hotline Device	<p>Check this check box to make this device a Hotline device. Hotline devices can only connect to other Hotline devices. This feature is an extension of PLAR, which configures a phone to automatically dial one directory number when it goes off-hook. Hotline provides additional restrictions that you can apply to devices that use PLAR.</p> <p>To implement Hotline, you must also create a softkey template without supplementary service softkeys, and apply it to the Hotline device.</p>
Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain	<p>From the drop-down list box, select an MLPP domain to associate with this device. If you leave the value <None>, this device inherits its MLPP domain from the value set for the device pool for the device. If the device pool does not have an MLPP Domain setting, this device inherits its MLPP Domain from the value set for the MLPP Domain Identifier enterprise parameter.</p>
MLPP Indication	<p>Be aware that this setting is not available for all devices. If available, this setting specifies whether a device that can play precedence tones will use the capability when it places an MLPP precedence call.</p> <p>From the drop-down list box, choose a setting to assign to this device from the following options:</p> <ul style="list-style-type: none"> • Default—This device inherits its MLPP indication setting from its device pool. • Off—This device does not handle nor process indication of an MLPP precedence call. • On—This device does handle and process indication of an MLPP precedence call. <p>Note Do not configure a device with the following combination of settings: MLPP Indication is set to Off or Default (when default is Off) while MLPP Preemption is set to Forceful.</p>

Field	Description
MLPP Preemption	<p>Be aware that this setting is not available for all devices. If available, this setting specifies whether a device that can preempt calls in progress will use the capability when it places an MLPP precedence call.</p> <p>From the drop-down list box, choose a setting to assign to this device from the following options:</p> <ul style="list-style-type: none"> • Default—This device inherits its MLPP preemption setting from its device pool. • Disabled—This device does not allow preemption of lower precedence calls to take place when necessary for completion of higher precedence calls. • Forceful—This device allows preemption of lower precedence calls to take place when necessary for completion of higher precedence calls. <p>Note Do not configure a device with the following combination of settings: MLPP Indication is set to Off or Default (when default is Off) while MLPP Preemption is set to Forceful.</p>
Port Information (POTS)	
Port Direction	<p>Choose the direction of calls that are passing through this port:</p> <ul style="list-style-type: none"> • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Bothways—Use for inbound and outbound calls (default).
Prefix DN(for FXS ports)	<p>Enter the prefix digits that are appended to the digits that this trunk receives on incoming calls.</p> <p>Cisco Unified Communications Manager adds prefix digits after first truncating the number in accordance with the Num Digits setting.</p> <p>You can enter the international escape character +.</p>

Field	Description
Num Digits(for FXS ports)	<p>Enter the number of significant digits to collect, from 0 to 32.</p> <p>Cisco Unified Communications Manager counts significant digits from the right (last digit) of the number called.</p> <p>Use this field for the processing of incoming calls and to indicate the number of digits starting from the last digit of the called number that is used to route calls coming into the PRI span. See Prefix DN.</p>
Expected Digits(for FXS ports)	<p>Enter the number of digits that are expected on the inbound side of the trunk. For this rarely used field, leave zero as the default value if you are unsure.</p>
SMDI Port Number (0-4096)	<p>Use this field for analog access ports that connect to a voice-messaging system.</p> <p>Set the SMDI Port Number equal to the actual port number on the voice-messaging system to which the analog access port connects.</p> <p>Note Voice-mail logical ports typically must match physical ports for the voice-messaging system to operate correctly.</p>
Unattended Port	<p>Check this check box to indicate an unattended port on this device.</p>
Geo Location Configuration	
Geo Location	<p>From the drop-down list box, choose a geo location.</p> <p>You can choose the Unspecified geo location, which designates that this device does not associate with a geo location.</p> <p>You can also choose a geolocation that has been configured with the System > Geolocation Configuration menu option.</p>

Field	Description
Geo Location Filter	<p>From the drop-down list box, choose a geo location filter.</p> <p>If you leave the <None> setting, no geo location filter gets applied for this device.</p> <p>You can also choose a geo location filter that has been configured with the System Geolocation Filter menu option.</p> <p>Note This field is not supported for FXS gateways.</p>
Product-Specific Configuration	
Model-specific configuration fields defined by the gateway manufacturer	<p>The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice.</p> <p>To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box.</p> <p>If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.</p>

Digital Access T1 Trunks on Cisco VG200 Gateway Template Field Descriptions

The following table provides detailed field descriptions for adding or updating values for the T1 CAS trunks on a Cisco VG200 gateway.

Some fields display the values that were configured in Cisco Unified Communications Manager Administration.

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

Table 11: Digital Access T1 (T1-CAS) Configuration Settings

Field	Description
End-Point Name	<p>For VG200 gateways, this display-only field contains a string that Cisco Unified Communications Manager generates that uniquely identifies the VG200 digital interface.</p> <p>For example:</p> <p>S1/DS1-0@VG200-2</p> <p>S1 indicates slot 1, DS1-0 designates the digital interface, and @VG200-2 designates the VG200 template name.</p>
Description	<p>Enter a description that clarifies the purpose of the device. The description can include up to 50 characters in any language, but it cannot include double-quotes ("), percentage sign (%), ampersand (&), back-slash (\), or angle brackets (<>).</p>
Device Pool	<p>From the drop-down list box, choose the appropriate device pool.</p> <p>The device pool specifies a collection of properties for this device including Communications Manager Group, Date/Time Group, Region, and Calling Search Space for auto-registration of devices.</p>
Call Classification	<p>This parameter determines whether an incoming call that is using this gateway is considered off the network (OffNet) or on the network (OnNet).</p> <p>When the Call Classification field is configured as Use System Default, the setting of the Cisco Unified Communications Manager clusterwide service parameter, Call Classification, determines whether the gateway is OnNet or OffNet.</p> <p>This field provides an OnNet or OffNet alerting tone when the call is OnNet or OffNet, respectively.</p>
Media Resource Group List	<p>This list provides a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from among the available media resources according to the priority order that is defined in a Media Resource List.</p>

Field	Description
Calling Search Space	<p>From the drop-down list box, choose the appropriate calling search space. A calling search space designates a collection of route partitions that are searched to determine how a collected (originating) number should be routed.</p> <p>You can configure the number of calling search spaces that display in this drop-down list box by using the Max List Box Items enterprise parameter. If more calling search spaces exist than the Max List Box Items enterprise parameter specifies, the ellipsis button (...) displays next to the drop-down list box. Click the... button to display the Select Calling Search Space window. Enter a partial calling search space name in the List items where Name contains field. Click the desired calling search space name in the list of calling search spaces that displays in the Select item to use box and click OK.</p> <p>Note To set the maximum list box items, choose System > Enterprise Parameters and choose UnifiedCMAAdmin Parameters.</p>
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when automated alternate routing (AAR) is performed. The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.
Location	Choose the appropriate location for this device. The location specifies the total bandwidth that is available for calls to and from this location. A location setting of None means that the locations feature does not keep track of the bandwidth that this device consumes.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.

Field	Description
MLPP Domain	<p>From the drop-down list box, choose an MLPP domain to associate with this device. If you leave the value <None>, this device inherits its MLPP domain from the value that was set for the device's device pool. If the device pool does not have an MLPP Domain setting, this device inherits its MLPP Domain from the value that was set for the MLPP Domain Identifier enterprise parameter.</p>
Handle DTMF Precedence Signals	<p>Check this box to enable this gateway to interpret special DTMF signals as MLPP precedence levels.</p>
Load Information	<p>Enter the appropriate firmware load information for the gateway.</p> <p>The values that you enter here override the default values for this gateway.</p>
Port Selection Order	<p>Choose the order in which channels or ports are allocated for outbound calls from first (lowest number port) to last (highest number port) or from last to first.</p> <p>Valid entries include TOP_DOWN (first to last) or BOTTOM_UP (last to first). If you are not sure which port order to use, choose TOP_DOWN.</p>
Digit Sending	<p>Choose one of the following digit sending types for out-dialing:</p> <ul style="list-style-type: none"> • DTMF—Dual-tone multifrequency. Normal touchtone dialing • MF—Multifrequency • PULSE—Pulse (rotary) dialing
Network Locale	<p>From the drop-down list box, choose the locale that is associated with the gateway. The network locale identifies a set of detailed information to support the hardware in a specific location. The network locale contains a definition of the tones and cadences that the device uses in a specific geographic area.</p> <p>Note Choose only a network locale that is already installed and supported by the associated devices. The list contains all available network locales for this setting, but not all are necessarily installed. If the device is associated with a network locale that it does not support in the firmware, the device will fail to come up.</p>

Field	Description
SMDI Base Port	Enter the first SMDI port number of the T1 span. If you set this parameter to a nonzero value and this gateway belongs to an unknown type of route list, route group, or route list, hunting does not continue past this span.
Geo Location Configuration	
Geo Location	From the drop-down list box, choose a geo location. You can choose the Unspecified geo location, which designates that this device does not associate with a geo location. You can also choose a geolocation that has been configured with the System > Geolocation Configuration menu option.
Geo Location Filter	From the drop-down list box, choose a geo location filter. If you leave the <None> setting, no geo location filter gets applied for this device. You can also choose a geo location filter that has been configured with the System > Geolocation Filter menu option.
Product-Specific Configuration	
Model-specific configuration fields that the gateway manufacturer defines	The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box. If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.

T1 PRI or E1 PRI Trunks on Cisco VG200 Gateway Template Field Descriptions

The following table provides field descriptions for adding or updating values for T1 PRI or E1 PRI trunks on a Cisco VG200 gateway.

Some fields display the values that were configured in Cisco Unified Communications Manager Administration.

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

Table 12: Field Descriptions for T1 PRI or E1 PRI Trunks

Field	Description
Device Information	
Endpoint Name	<p>For VG200 gateways, this display-only field contains a string that is generated by Cisco Unified Communications Manager that uniquely identifies the VG200 endpoint.</p> <p>For example: S1/DS1-0@VG200-2</p> <p>S1 indicates slot 1, DS1-0 designates the digital interface, and @VG200-2 designates the VG200 domain name.</p>
Description	<p>Enter a description for the end-point that you are configuring. The description can include up to 50 characters in any language, but it cannot include double-quotes ("), percentage sign (%), ampersand (&), back-slash (\), or angle brackets (<>).</p>
Device Pool	<p>Choose the device pool for this group of gateways/ports.</p> <p>A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco Unified Communications Manager group, and calling search space for auto-registration.</p>
Call Classification	<p>From the drop-down list box, choose an option to configure the device as on net, off net, or system default.</p> <p>If you chose 'Use System Default' at the device level, the system uses the value of the service parameter to determine whether the device is internal (on net) or external (off net).</p>
Network Locale	<p>Choose the network locale that you want to associate with this gateway.</p> <p>The Network Locale comprises a set of tones and cadences that Cisco gateways and phones use when communicating with the PSTN and other networks in a specific geographical area.</p>

Field	Description
Media Resource Group List	<p>Choose the media resource group list (MRGL) for this group of gateways/ports.</p> <p>An MRGL specifies a list of prioritized media resource groups. An application can choose required media resources from among the available ones according to the priority order that is defined in the MRGL.</p>
Location	<p>Choose the location for this group of gateways/ports.</p> <p>A location indicates the remote location that is accessed by using restricted bandwidth connections.</p>
AAR Group	<p>Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.</p>
Load Information	<p>Enter the appropriate load information for the custom software for gateway. The values that you enter here override the default values for this gateway.</p> <p>To use the default load, leave this field blank.</p>
Transmit UTF-8 for Calling Party Name	<p>This device uses the user locale setting of the device's device pool to determine whether to send Unicode and whether to translate received Unicode information.</p> <p>For the sending device, if you check this check box and the user locale setting in the device's device pool matches the terminating phone's user locale, the device sends Unicode. If the user locale settings do not match, the device sends ASCII.</p> <p>The receiving device translates incoming Unicode characters based on the user locale setting of the sending device's device pool. If the user locale setting matches the terminating phone's user locale, the phone displays the characters.</p> <p>The phone may display junk characters if the two ends of the trunk configure user locales that do not belong to the same language group.</p>
Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain (e.g., "0000FF")	<p>Enter a hexadecimal value for the MLPP domain that is associated with this device. Ensure that the value is blank or a value between 0 and FFFFFFFF.</p>

Field	Description
Interface Information	
PRI Protocol Type	<p>Choose the communications protocol for the span:</p> <p>For E1 PRI spans, you have these options:</p> <ul style="list-style-type: none"> • PRI AUSTRALIAN—Australian ISDN • PRI EURO—European ISDN • PRI ISO QSIG E1—European inter-PBX signaling protocol <p>For T1 PRI spans you have several options, depending on the carrier or switch:</p> <ul style="list-style-type: none"> • PRI 4ESS —AT&T interexchange carrier, Lucent Definity switch • PRI 5E8 Custom—CiscoUnifiedIPPhone, Nortel Meridian switch, Lucent Definity switches • PRI 5E8 Teleos—Madge Teleos box • PRI 5E8 Intecom—Intecom PBX • PRI5E9—AT&T family local exchange switch or carrier • PRI NI2—Sprint local exchange switch or carrier • PRI DMS-100—Sprint local exchange switch or carrier • PRI DMS-250—MCI and Sprint local exchange switch or carrier • PRI ETSI SC—European local exchange carrier on T1; also, Japanese local exchange. • PRI ISO QSIG T1—Inter-PBX signaling protocol
Protocol Side	<p>Choose the appropriate protocol side. This setting specifies whether the gateway connects to a Central Office/Network device or to a User device.</p> <p>Make sure that the two ends of the PRI connection use opposite settings. For example, if you connect to a PBX and the PBX uses User as its protocol side, choose Network for this device. Typically, use User for Central Office (CO) connections.</p>
Channel Selection Order	<p>Choose the order in which channels or ports are enabled from first (lowest number port) to last (highest number port) or from last to first.</p> <p>Valid entries include TOP_DOWN (last to first) or BOTTOM_UP (first to last). If you are not sure which port order to use, choose TOP_DOWN. The default specifies BOTTOM_UP.</p>

Field	Description
Channel IE Type	<p>Choose one of the following values to specify whether channel selection is presented as a channel map or a slot map:</p> <ul style="list-style-type: none"> • Number—B-channel usage always presents a channel map format. • Slotmap—B-channel usage always presents a slotmap format. • Use Number When 1B—Channel usage presents a channel map for one B-channel but presents a slotmap if more than one B-channel exists. This represents the default value.
PUnifiedCMType	<p>Specify the digital encoding format. Choose one of the following formats:</p> <ul style="list-style-type: none"> • a-law: Use for Europe and the rest of the world. • mu-law: Use for North America, HongKong, Taiwan, and Japan.
Delay for First Restart	<p>For this optional field, enter the rate, in 1/8-second increments, at which the spans are brought in service. The delay occurs when many PRI spans are enabled on a system and the Inhibit Restarts at PRI Initialization check box is unchecked. The default value specifies 32.</p> <p>For example, set the first five cards to 0 and set the next five cards to 16. (Wait 2 seconds before bringing them in service.)</p>
Delay Between Restarts	<p>Enter the time, in 1/8-second increments, between restarts. The delay occurs when a PRI RESTART is sent if the Inhibit Restarts check box is unchecked. The default value specifies 4.</p>
Inhibit Restarts at PRI Initialization	<p>A restart message confirms the status of the ports on a PRI span. If RESTARTS are not sent, Cisco Unified Communications Manager assumes that the ports are in service. By default, the box gets checked.</p> <p>When the D-channel successfully connects with another PRI trunk D-channel, it sends restarts when this box is unchecked.</p>

Field	Description
Enable Status Poll	<p>Check the check box to enable the Cisco Unified Communications Manager advanced service parameter, Change B-Channel Maintenance Status. This service parameter allows you to take individual B-channels out of service while the B-channels are active.</p> <p>Uncheck this check box to disable the service parameter Change B-Channel Maintenance Status.</p> <p>Default leaves this field unchecked.</p>
Unattended Ports	<p>Check this check box to indicate an unattended port on this device.</p>
Call Routing Information - Inbound Calls	
Significant Digits	<p>This field represents the number of final digits that a PRI span should retain on inbound calls. A trunk with significant digits enabled truncates all but the final few digits of the address that is provided on an inbound call.</p> <p>Enable or disable this check box depending on whether you want to collect significant digits:</p> <ul style="list-style-type: none"> • If you do not check the check box, Cisco Unified Communications Manager does not truncate the inbound number. • If you check the check box, you also need to choose the number of significant digits to collect. By default, the box remains checked.
Calling Search Space	<p>Choose the calling search space for this group of phones/ports.</p> <p>A calling search space specifies the collection of Route Partitions that are searched to determine how a dialed number should be routed.</p>
AAR Calling Search Space	<p>Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.</p>

Field	Description
Prefix DN	<p>For this optional field, enter the prefix digits that are appended to the digits that this trunk receives on incoming calls.</p> <p>Cisco Unified Communications Manager adds prefix digits after first truncating the number in accordance with the Num Digits setting.</p>
Call Routing Information - Outbound Calls	
Calling Line ID Presentation	<p>Choose whether you want the Cisco Unified Communications Manager to transmit or block the caller's phone number.</p> <p>Choose Default if you do not want to change calling line ID presentation. Choose Allowed if you want Cisco Unified Communications Manager to send "Calling Line ID Allowed." Choose Restricted if you want Cisco Unified Communications Manager to send "Calling Line ID Restricted."</p>
Calling Party Selection	<p>Any outbound call on a gateway can send directory number information. Choose which directory number is sent:</p> <ul style="list-style-type: none"> • Originator—Send the directory number of the calling device. This number serves as the default value. • First Redirect Number—Send the directory number of the redirecting device. • Last Redirect Number—Send the directory number of the last device that redirected the call.

Field	Description
Calling Party IE Number Type Unknown	<p>Choose the format for the type of number in calling party directory numbers.</p> <p>Cisco Unified Communications Manager sets the calling directory number (DN) type. Cisco recommends that you do not change the default value unless you have advanced experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified Communications Manager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that are using routing as a non-national type number.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none">• Communications Manager—The Cisco Unified Communications Manager sets the directory number type. This option represents the default value.• International—Use when you are dialing outside the dialing plan for your country.• National—Use when you are dialing within the dialing plan for your country.• Unknown—This option specifies that the dialing plan is unknown.

Field	Description
Called Party IE Number Type Unknown	<p>Choose the format for the type of number in called party directory numbers. Cisco Unified Communications Manager sets the called directory number (DN) type. Cisco recommends that you do not change the default value unless you have extensive experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified Communications Manager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that use routing as a non-national type number.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> • Communications Manager—For the default setting, the Cisco Unified Communications Manager sets the directory number type. • International—Use when you are dialing outside the dialing plan for your country. • National—Use when you are dialing within the dialing plan for your country. • Unknown—This option specifies that the dialing plan is unknown.

Field	Description
Called Numbering Plan	<p>Choose the format for the numbering plan in called party directory numbers.</p> <p>Cisco Unified Communications Manager sets the called DN numbering plan. Cisco recommends that you do not change the default value unless you have extensive experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified Communications Manager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that are using routing as a non-national type number.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none">• Communications Manager—For the default setting, the Cisco Unified Communications Manager sets the Numbering Plan in the directory number.• ISDN—Use when you are dialing outside the dialing plan for your country.• National Standard—Use when you are dialing within the dialing plan for your country.• Private—Use when you are dialing within a private network.• Unknown—This option specifies that the dialing plan is unknown.

Field	Description
Calling Numbering Plan	<p>Choose the format for the numbering plan in calling party directory numbers.</p> <p>Cisco Unified Communications Manager sets the calling DN numbering plan. Cisco recommends that you do not change the default value unless you have extensive experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified Communications Manager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that are using routing as a non-national type number.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> • Communications Manager—For the default setting, the Cisco Unified Communications Manager sets the Numbering Plan in the directory number. • ISDN—Use when you are dialing outside the dialing plan for your country. • National Standard—Use when you are dialing within the dialing plan for your country. • Private—Use when you are dialing within a private network. • Unknown—This option specifies that the dialing plan is unknown.
Number of Digits to Strip	<p>Choose the number of digits, from 0 to 32, to strip on outbound calls. The default value specifies 0.</p> <p>For example, 8889725551234 is dialed; the number of digits to strip is 3. In this example, Cisco Unified Communications Manager strips 888 from the outbound number.</p>
Caller ID DN	<p>Enter the pattern, from 0 to 24 digits, that you want to use for caller ID.</p> <p>For example, in North America</p> <ul style="list-style-type: none"> • 555XXXX = Variable caller ID, where X equals an extension number. The CO appends the number with the area code if you do not specify it. • 5555000 = Fixed caller ID, for when you want the Corporate number to be sent instead of the exact extension from which the call is placed. The CO appends the number with the area code if you do not specify it.

Field	Description
SMDI Base Port	Enter the first SMDI port number of the T1 span.
PRI Protocol Type Specific Information	
Display IE Delivery	For this optional field, check the check box to enable delivery of the display information element (IE) in SETUP and CONNECT messages for the calling and called party name delivery service. By default, the box remains unchecked.
Redirecting Number IE Delivery—Outbound	<p>For this optional field, check the check box to include the Redirecting Number IE in the SETUP message to indicate the first redirecting number and the redirecting reason of the call when a call is forwarded. By default, the box remains unchecked.</p> <p>This setting applies to the SETUP message only on all protocols for digital access gateways.</p>
Redirecting Number IE Delivery—Inbound	<p>For this optional field, check the check box to include the Redirecting Number IE in the SETUP message to indicate the first redirecting number and the redirecting reason of the call when a call is forwarded. By default, the box remains unchecked.</p> <p>This setting applies to the SETUP message only on all protocols for digital access gateways.</p>
Send Extra Leading Character in Display IE	<p>Check this check box to include a special leading character byte (non ASCII, nondisplayable) in the DisplayIE field.</p> <p>Uncheck this check box to exclude this character byte from the DisplayIE field.</p> <p>This check box only applies to the DMS-100 protocol and the DMS-250 protocol.</p> <p>Default leaves this setting disabled (unchecked).</p>

Field	Description
Setup of Non-ISDN Progress Indicator IE Enable	<p>For this optional field, you may need to specify a value in this field to force ringback on some PBXs.</p> <p>The default specifies unchecked. Check this check box only if users are not receiving ringback tones on outbound calls.</p> <p>When this setting is enabled, Cisco Unified Communications Manager sends Q.931 setup messages out digital (that is, non-H.323) gateways with the Progress Indicator field set to non-ISDN.</p> <p>This message notifies the destination device that the Cisco Unified Communications Manager gateway is non-ISDN and that the destination device should play inband ringback.</p> <p>This problem usually associates with Cisco Unified Communications Managers that connect to PBXs through digital gateways.</p>
MCDN Channel Number Extension Bit Set to Zero	This field applies to DMS-100 protocol only. Check the check box to indicate that an Interface Identifier is present. By default, the box remains unchecked.
Send Calling Name in Facility IE	This field applies to DMS-100 protocol only. Enter the value that you obtained from the PBX provider. Valid values range from 0 to 255.
Interface Identifier Present	This field applies to DMS-100 protocol only. Check the check box to indicate that an Interface Identifier is present. By default, the box remains unchecked.
Interface Identifier Value	This field applies to DMS-100 protocol only. Enter the value that you obtained from the PBX provider. Valid values range from 0 to 255.
Connected Line ID Presentation	<p>Choose whether you want the Cisco Unified Communications Manager to allow or block the connected party's phone number.</p> <p>Choose Default if you do not want to change the connected line ID presentation. Choose Allowed if you want Cisco Unified Communications Manager to send "Connected Line ID Allowed." Choose Restricted if you want Cisco Unified Communications Manager to send "Connected Line ID Restricted."</p>
UUIE Configuration	

Field	Description
Passing Precedence Level Through UUIE	<p>Check this check box to enable passing MLPP information through the PRI 4ESS UUIE field. This box is used for working along with DRSN switch.</p> <p>The system makes this check box available only if the PRI Protocol Type value of PRI4ESS is specified for this gateway.</p> <p>The default value specifies unchecked.</p>
Security Access Level	<p>Enter the value for the security access level. Valid values include 00 through 99. The system makes this field available only if the Passing Precedence Level Through UUIE check box is checked. The default value specifies 2.</p>
Geo Location Configuration	
Geo Location	<p>From the drop-down list box, choose a geo location.</p> <p>You can choose the Unspecified geo location, which designates that this device does not associate with a geo location.</p> <p>You can also choose a geolocation that has been configured with the System > Geolocation Configuration menu option.</p>
Geo Location Filter	<p>From the drop-down list box, choose a geo location filter.</p> <p>If you leave the <None> setting, no geo location filter gets applied for this device.</p> <p>You can also choose a geo location filter that has been configured with the System > Geolocation Configuration Filter menu option.</p>
Product-Specific Configuration	
<p>The gateway manufacturer specifies the model-specific fields under product-specific configuration. To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup window. If you need more information, refer to the documentation for the specific gateway that you are configuring.</p>	

Port Configuration Settings

Detailed field descriptions are available for all port types and Cisco-supported gateway configuration settings.

Related Topics

[POTS Port Configuration Settings](#), on page 60

[E and M Ports for Digital Access T1 Field Descriptions](#), on page 62

[Gateway Configuration Settings](#), on page 20

[Topics Related to Gateway Configuration Settings](#), on page 64

POTS Port Configuration Settings

The following table describes the POTS port configuration settings.

Table 13: POTS Port Configuration Settings

Field	Description
Port Type	From the Port Type drop-down list box, choose POTS.
Beginning Port Number Ending Port Number	Choose whether you want to add and configure all available ports, a single port, or a range of ports by setting values for the Beginning Port Number and Ending Port Number fields: <ul style="list-style-type: none"> • To specify a range of ports, choose appropriate values for Beginning Port Number and Ending Port Number. • To create a single port, choose the same number in the Beginning Port Number and Ending Port Number fields. • To add all available ports, choose All Ports for both the Beginning Port Number and Ending Port Number fields.
Port Direction	Choose the direction of calls that pass through this port: <ul style="list-style-type: none"> • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Bothways—Use for inbound and outbound calls (default).
Audio Signal Adjustment into IP Network	This field specifies the gain or loss that is applied to the received audio signal relative to the port application type. <p>Note Improper gain setting may cause audio echo. Use caution when you are adjusting this setting.</p>
Audio Signal Adjustment from IP Network	This field specifies the gain or loss that is applied to the transmitted audio signal relative to the port application type. <p>Note Improper gain setting may cause audio echo. Use caution when you are adjusting this setting.</p>

Field	Description
Prefix DN	<p>Enter the prefix digits that are appended to the digits that this trunk receives on incoming calls.</p> <p>The Cisco Unified Communications Manager adds prefix digits after it truncates the number in accordance with the Num Digits setting.</p>
Num Digits	<p>Enter the number of significant digits to collect, from 0 to 32.</p> <p>Cisco Unified Communications Manager counts significant digits from the right (last digit) of the number that is called.</p> <p>Use this field for the processing of incoming calls and to indicate the number of digits starting from the last digit of the called number that are used to route calls that are coming into the PRI span. See Prefix DN.</p>
Expected Digits	<p>Enter the number of digits that are expected on the inbound side of the trunk. For this rarely used field, leave zero as the default value if you are unsure.</p>
Call Restart Timer (1000-5000 ms)	<p>Call Restart Timer (1000-5000 ms); ms indicates time in milliseconds.</p>
Offhook Validation Timer (100-1000 ms)	<p>Offhook Validation Timer (100-1000 ms); ms indicates time in milliseconds.</p>
Onhook Validation Timer (100-1000 ms)	<p>Onhook Validation Timer (100-1000 ms); ms indicates time in milliseconds.</p>
Hookflash Timer (100-1500 ms)	<p>Hookflash Timer (100-1500 ms); ms indicates time in milliseconds.</p>
SMDI Port Number (0-4096)	<p>Use this field for analog access ports that connect to a voice-messaging system.</p> <p>Set the SMDI Port Number equal to the actual port number on the voice-messaging system to which the analog access port connects.</p> <p>Note Voice-mail logical ports typically must match physical ports for the voice-messaging system to operate correctly.</p>
Product-Specific Configuration	

Field	Description
Model-specific configuration fields that the gateway manufacturer defines	<p>The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice.</p> <p>To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box.</p> <p>If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.</p>

E and M Ports for Digital Access T1 Field Descriptions

Use the following field descriptions when you are adding or updating values for E&M ports for the T1 CAS trunks on a Cisco VG200 gateway.

Some fields display the values that were configured in Cisco Unified Communications Manager Administration.

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

The following table describes the E & M port configuration settings.

Table 14: E and M Port Configuration Settings

Field	Description
Port Type	From the Port Type drop-down list box, choose EANDM.
Beginning Port Number Ending Port Number	<p>Choose whether you want to add and configure all available ports, a single port, or a range of ports by setting values for the Beginning Port Number and Ending Port Number fields:</p> <ul style="list-style-type: none"> • To specify a range of ports, choose appropriate values for Beginning Port Number and Ending Port Number. • To create a single port, choose the same number in the Beginning Port Number and Ending Port Number fields. • To add all available ports, choose All Ports for both the Beginning Port Number and Ending Port Number fields.
Port Details	

Field	Description
Port Direction	Choose the direction of calls that pass through this port: <ul style="list-style-type: none"> • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Both Ways—Use for inbound and outbound calls.
Calling Party Selection	Any outbound call on a gateway can send directory number information. Choose which directory number is sent: <ul style="list-style-type: none"> • Originator—Send the directory number of the calling device. • First Redirect Number—Send the directory number of the redirecting device. • Last Redirect Number—Send the directory number of the last device to redirect the call. • First Redirect Number (External)—Send the directory number of the first redirecting device with the external phone mask applied. • Last Redirect Number (External)—Send the directory number of the last redirecting device with the external phone mask applied.
Caller ID Type	Choose the caller ID type: <ul style="list-style-type: none"> • ANI—Choose this type to use the Asynchronous Network Interface (ANI) caller ID type. • DNIS—Choose this type to use the Dialed Number Identification Service (DNIS) caller ID type.
Caller ID DN	Enter the pattern that you want to use for calling line ID, from 0 to 24 digits. For example, in North America: <ul style="list-style-type: none"> • 555XXXX = Variable calling line ID, where X equals an extension number. The CO appends the number with the area code if you do not specify it. • 5555000 = Fixed calling line ID, where you want the Corporate number to be sent instead of the exact extension from which the call is placed. The CO appends the number with the area code if you do not specify it.

Field	Description
Prefix DN	<p>Enter the prefix digits that are appended to the called party number on incoming calls.</p> <p>The Cisco Unified Communications Manager adds prefix digits after first truncating the number in accordance with the Num Digits setting.</p>
Num Digits	<p>Choose the number of significant digits to collect, from 0 to 32. Cisco Unified Communications Manager counts significant digits from the right (last digit) of the number that is called.</p> <p>Use this field if you check the Sig Digits check box. Use this field for the processing of incoming calls and to indicate the number of digits starting from the last digit of the called number that are used to route calls that are coming into the PRI span. See Prefix DN and Sig Digits.</p>
Expected Digits	<p>Enter the number of digits that are expected on the inbound side of the trunk. If you are unsure, leave zero as the default value for this rarely used field.</p>
Unattended Port	<p>Check this check box to indicate an unattended port on this device.</p>
Product-Specific Configuration	
Model-specific configuration fields that the gateway manufacturer defines	<p>The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice.</p> <p>To view field descriptions and help for product-specific configuration items, click the “?” information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box.</p> <p>If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.</p>

Topics Related to Gateway Configuration Settings

- [Cisco Gateway Additions, on page 1](#)
- [Find Gateway Template, on page 6](#)
- [Add or Edit Gateway Template, on page 8](#)

- [Gateway Configuration Settings, on page 20](#)
- [Port Configuration Settings, on page 59](#)
- [Delete Cisco Gateway Records Using Query](#)
- [Generate Cisco Gateway Reports](#)

